

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number
WO 2005/016960 A2

(51) International Patent Classification⁷: **C07K 7/00**

(21) International Application Number:
PCT/IB2004/002936

(22) International Filing Date: 13 August 2004 (13.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03292030.8 14 August 2003 (14.08.2003) EP
0309962 14 August 2003 (14.08.2003) FR

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **AMINO ACID SEQUENCES FACILITATING PENETRATION OF A SUBSTANCE OF INTEREST INTO CELLS AND/OR CELL NUCLEI**

(57) Abstract: The present invention relates to an amino acid sequence being able to facilitate penetration of a substance of interest inside cells and/or cell nuclei and having the following formula (I) $[(X_1)_p [(X_2)_o (B)_n] X B X X B]_m (X_2)_q$ Wherein X_1 and X_2 are amino acid sequences of 1 to 20 amino acids; p and q are whole numbers between 0 and 5; B is a basic amino acid; X is a non-basic, preferably hydrophobic amino acid, such as alanine, isoleucine, leucine, methionine, phenylalanine, tryptophan, valine or tyrosine; n is 2 or 3; m is 1 to 4; o is 0 or 1, between 0 and 5; B is a basic amino acid; X is a non-basic, preferably hydrophobic amino acid, such as alanine, isoleucine, leucine, methionine phenylalanine, tryptophan, valine or tyrosine; n is 2 or 3; m is 1 to 4; o is 0 or 1.

WO 2005/016960 A2